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**AGENDA ITEM 6. REVIEW AND REPORTING OF REGIONAL PROGRAMMES, PROJECTS  
AND WORKING GROUPS, APRIL 2019 – APRIL 2021**

**CARIBBEAN MARINE ATLAS PHASE 2 CMA2 PROJECT PROGRESS REPORT**

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CMA is an online platform designed and developed from 2016 to 2020 coordinated by IODE-IOC-UNESCO throughout Marine and Coastal Research Institute (INVEMAR) in Colombia. Brings together at least 25 countries (including CLME+), 8 of which are actively providing national information and data (Trinidad & Tobago, Guatemala, Jamaica, Barbados, Belize, Dominican Republic, Mexico and Colombia). CMA is co-financed by Government Flanders (Kingdom of Belgium). The information management is driven through more than 50 GIS experts from different countries and entities, registered on platform and trained to manage national information from country pilots. The platform is available and updated (<https://www.caribbeanmarineatlas.net/>).

2016 to June 2019 marked phase 2 of the Caribbean Marine Atlas Project (CMA2), which again centered on the sustainable operationalization of the Atlas as an online digital technology platform in support of ICZM and EBM at the scale of the Caribbean large marine ecosystem (CLME), with special attention to coastal hazards, climate change, fisheries, land-based sources of pollution and biodiversity and habitats. CMA2 was developed based on the self-government of a variety of uploaded spatial data and information products by partners. The information management on CMA2 is based on the use of own protocols, standards, and IODE information policy, to guarantee good practices and endorses the good use of high quality information. Training, awareness building and dissemination activities were also conducted. In addition, CMA2 published a set of 10 regional indicators using national information. The platform was piloted in eight countries and at the regional level. To improve uptake, sustainability, and up-scaling of results, the CMA2 Project works closely with relevant efforts linked to the implementation of the regionally endorsed 10-year Caribbean and North Brazil Shelf large marine ecosystems (CLME+) Strategic Action Programme (SAP). This CMA2 'community' maintains communication and dissemination regarding concerns and use of the Atlas at regional technical/scientific events. CMA works addressing efforts to achieve an electronic repository of spatial information for the region with different tools and functionalities, including its capacity and flexibility to receive and support new content in support of initiatives and projects that manage marine and data information.

➤ **FINAL CMA2 ACTIVITIES: 2020**

On 2020 activities were developed in response to recommendations from CMA2 partner countries related to updating and improve viewer usability. CMA platform is supported by last GeoNode version as technological platform and has a new map viewer interface. To date CMA platform offers 351 thematic layers, 31 maps, 285 documents and is managed through 53 users with extra permissions for data and information management, useful for countries, institutions, initiatives and projects.

**Final Regional CMA2 Workshop.** The Marine and Coastal Research Institute INVEMAR on 27th May offered a virtual space to recognize the countries and projects support in CMA project development, but also inspect the potential intention to the regional partners toward to foster sustainability of the CMA platform in order to assure activity and its use for the future. Especially in this time, the active participation of the regional governments is highly important in order to recognize regional endorse and will to use and contribute to the Atlas. During the workshop all together rethought the CMA platform sustainability, recognizing the contribution that each partner will be able to offer. During the workshop, the participants expressed interest in the use and uploading of new and updated data and information.

The main ideas and commitments derived from the meeting are mentioned as follow:

- Six countries: Belize, Dominican Republic, Jamaica, Guatemala, Mexico, and Trinidad & Tobago, expressed their interest in continue working and uploading data and information to the CMA platform.
- Several countries express the need of a refresh training on GeoNode use in order to intensify/activate the upload data and information in the CMA platform.
- Most countries expressed also that they have new and update information that wants to share in the atlas.
- Dominican Republic high light the importance of the information systems to date in the country, that as best practice they are implementing in all projects and initiatives. This derived from the CMA2 work.
- Finally, several discussions during the meeting were around the need for CMA evolution from a repository to a decision-making tool, more usable which contain products driven by demand.

Face to end to financing, CMA partners has confirmed interest on use and maintain the platform, and a sustainability strategy is going to be agreed next months, in order to continue the information dynamic and enhance of amount and updating of the marine and coastal spatial data in the Atlas.

Covid-19 implications only affected the final regional workshop, it was realized in a virtual way, and with convenient preparation, the communication was solved among all partners.

### **Meetings to engage new project/initiatives partners**

As part of the effort to spread the use of the CMA platform, two new initiatives call for meetings to recognize opportunities to work together.

- Caribbean Geospatial Development Initiative - CARIGEO  
CARIGEO is a collaborative effort among the Regional Committee of the United Nations Committee of Experts on Global Geospatial Information Management for the Americas (UN-GGIM: Americas), the United Nations Economic Commission for Latin America and the Caribbean (UN-ECLAC or CEPAL), the United Nations Group of Experts on Geographical Names (UNGEGN), public agencies of Member States and Territories within the Caribbean, geospatial private sector organizations, academic institutions and civil society representatives, which seeks to empower the countries and territories of the Caribbean region to advance the greater use and sharing of geospatial, statistical and related information to support improved decision making for sustainable national and regional development. Since July 2020 derived from a CMA presentation during the Marine Spatial Data Infrastructure Committee MMSDIWG Meeting (Meso American & Caribbean

Sea Hydrographic Commission MACHC) through Linda Peters from Caribbean Geoportal of CARIGEO project was requested several meetings (8 July, 24 July, 28 July, 6 August, 1 September) to present the Caribbean Portal (supported by ESRI) and also recognize CMA characteristics, benefits of the platforms and the possibility of collaboration and information sharing between them. Finally, CMA confirmed interest to participate in the CARIGEO initiative. CMA technical staff was added to the stakeholder's list and invited to the next meetings for CARIGEO. We have already begun work to look at connecting the data from the Caribbean Marine Atlas to the Caribbean Geoportal.

- Marine Atlas of the Network of Marine Protected Areas of the Gulf of Mexico (RedGolfo) Since September 2020 derived from Marine Spatial Data Infrastructure Committee MMSDIWG Meeting (Meso American & Caribbean Sea Hydrographic Commission MACHC), Gonzalo CID from Marine Atlas of the Network of Marine Protected Areas of the Gulf of Mexico (RedGolfo) project (EEUU, Mexico and Cuba), requested a meeting to express the need to build an atlas for the RedGolfo project. There was a first joint working session between the teams of both projects (September 10), as a result, the RedGolfo project wants to work hand in hand with CMA to take advantage of the platform and replicate the methodology applied by CMA in the construction of a marine spatial data infrastructure of RedGolfo project.

#### ➤ **CLOSE CMA2 PROJECT AND FUTURE CMA SUSTAINABILITY: 2021**

Flanders Government demonstrated real believing in granting opportunities to our region and the confidence in INVEMAR to undertake the challenging task of coordinating and participating in CMA project. CMA initiative covered training opportunities, sharing of knowledge, define cooperation meetings, development of capabilities, but mainly promoted the potentiation of regional capacities in benefit of the Caribbean regions and of course of our country. INVEMAR appreciate having the chance to work for the region. In addition, it is timely to recognize the importance of the financial support received in response to that, from INVEMAR we will potentiate capabilities, assuring that they give chance to share knowledge and opportunities to the rest of countries in terms of marine and coastal spatial information tools.

On February, at the last meeting with Flanders representatives, the CMA project was closed, and the coordination project expressed and presented the continuity of the platform with the INVEMAR technical support. IN this year first actions for sustainability are the consolidation of the work plan with partners and GeoNode refreshing course training.

CMA leaves a significant capacity installed in terms of regional marine atlas, data and information (documents) repository and a set of indicators, all of these under standards and information policy established. Also, CMA derived a set of best practices related to Marine Spatial Data infrastructure in support to decision-makers, available to replicate at the national level, as was expressed by the Dominican Republic representative.

INVEMAR will continue hosting the Atlas, as well as technical support of the platform to all users. In the first semester, a refresh GeoNode training will be developed for those new users from partners and new initiatives/projects partners, according to recommendations derived from last 2020 May meeting. Dissemination activities will continue as usually several institutional, national, and regional events. CMA coordination, arrangements will be addressed to generate a strategy of sustainability proposal by consultation to the countries, in order to specify prioritized new needs, jointly actions and efforts (new dynamic-roles, NFP activities, dissemination, etc) and planning next steps. The proposal will be built based on the capacities of each one.

Finally, CMA will continue actions not only for countries engaged but also in support of the Ocean Info Hub Project (OIH-Project) as contributions to Ocean Science Decade from the Caribbean region.